



## *The Former Cleveland Plant*

July 2003

Working Together for a Safer Environment

### **The Past**

#### ***A Piece of History***

During World War I, the Cleveland Plant was established for the purpose of developing the process for large-scale manufacturing of mustard, a chemical warfare agent. Located at 340 East 131<sup>st</sup> Street at the corner of Taft Avenue, the former Cleveland Plant operated between March and November 1918.

It is suspected, from historical photographic records, that the chemical agent was disposed of in an area adjacent to the property.

#### ***Environmental Investigation***

The U.S. Army Corps of Engineers is the agency responsible for managing the Department of Defense Formerly Used Defense Site program. The Corps' goal is to identify, investigate, and remediate the property, while reducing the risk to human health and the environment. This environmental process is monitored and approved by the Environmental Protection Agency.



Following a community meeting in the fall 2001, the Corps conducted a geophysical survey on the property. A geophysical survey involves using electromagnetic and radar equipment to collect data to locate suspicious areas below the surface. This data was used to identify those areas requiring further environmental evaluation.

### **The Present**

#### ***Identifying Chemical Agent***

Since the photographs depict soldiers pouring the agent into trenches in the ground and also depict bags of lime which were used to neutralize the chemical, it is unlikely that mustard agent will be found in drums or containers.

In early July, a team of trained professionals will begin setting up equipment. The team will focus its investigation on several areas of the asphalt parking lot south of Taft Avenue. Work will be conducted on mostly



weekdays, during the day, over the next few months.

The Corps and its contractor, Parsons, plan to bore holes in the soil, take samples and test them to determine if the presence of mustard exists. The samples will also be tested for magnesium and arsenic. Two components of other known substances related to the manufacturing process at the former plant.

#### ***What is Mustard Agent?***

Mustard agent is a liquid that does not behave as a gas under ordinary temperatures. It is more stable in the soil than in water and more stable in a colder environment. If someone comes into direct contact with liquid mustard agent, it can burn the skin and cause blisters. If it is inhaled, it can cause respiratory problems. Mustard agent is not distinctly visible in the soil, but can be identified using special equipment.

### **Safety Awareness and Precautions**

The Corps has completed several plans and designed its approach to investigate the chemical agent with the utmost concern for safety. Strict safety procedures must be followed throughout the investigation. A tent structure will be placed in the paved parking lot while digging and trenching areas under investigation to fully contain any potential release of the chemical agent.



The tent will have a filtration system and additional air monitors inside and outside. Protective clothing will be worn by the personnel working on the site. Local responders including fire, police and EMS are informed and prepared in the event of an emergency.

In the unlikely event of a chemical release, the safety officer will sound a siren in the neighborhood. If you hear the siren, you should **Shelter In Place**. This means to stay in your home or office, turn off air conditioning, close windows and fireplace dampers and any other openings to the outside. Next, tune into your local news for more information.

Sheltering in place is likely to last an hour or two. Additional information is in the Shelter In Place brochure.

### **The Future**

#### **Environmental Restoration**

If mustard agent is found in the soils, then alternatives will be developed for environmental restoration. The alternatives and recommendations can range from the following:

- No further action needed
- Institutional controls including deed restrictions
- Subsurface removal and/or a combination of these alternatives.



After a report is prepared with the alternatives and recommendations for environmental restoration, the report is available for public comment over a 30-day period. These public comments are important and are considered in making the final decision. After the decision is made on how to best remediate the area, the Corps will return to implement the alternative.

### **Public Participation**

Public participation is important throughout the environmental cleanup process. The public can facilitate the process by gaining an understanding of the environmental issues at the former Cleveland Plant.

Information about the planned activities at the former Cleveland Plant will be presented at a **Community Meeting** on:

**Monday, July 21  
5:30 p.m. to 7:30 p.m.  
6:00 p.m. Presentation**

**Kenneth W. Clement  
Elementary School  
14311 Woodworth Rd.**

Information will also be updated periodically on the Corps of Engineers Web site: [www.lrl.usace.army.mil-environmental](http://www.lrl.usace.army.mil-environmental), Cleveland Plant

### **Contact Information**

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Call **1-800-527-4636**, press 3 to leave a message or call Public Affairs direct at 502-315-6835.